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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/638,421	08/12/2003	Daisuke Ochi	241516US90	5193
22850	7590	07/14/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			NGUYEN, TU X	
1940 DUKE STREET			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			2618	

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/638,421

Applicant(s)

OCHI ET AL.

Examiner

Tu X. Nguyen

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 4-9, 11-15, 17-21 and 23-24, are rejected under 35 U.S.C. 102(e) as being anticipated by Wilson et al. (US Patent 6,141,533).

Regarding claims 1 and 7, Wilson et al. disclose a communication system, comprising:

a user node (see 101, fig.2);

a corresponding node able to transmit signals to or receive signals from the user node (see 202, 106, 107, fig.2); and

a relay node (see 203, fig.2) that is constantly connected to the corresponding node (see 208, fig.2), the relay node being able to transmit signals to or receive signals from the user node (see 203, 106, fig.2), wherein the relay node is able to act as proxy for the user node to transmit signals to or receive signals from the corresponding node (see col.8 lines 12-24).

Regarding claims 2, 8, 14 and 20, Wilson et al. disclose the user node (see 101, fig.2) and the relay node (see 203, fig.2) act as a virtual node with respect to the corresponding node (see 208, 106, fig.2), the virtual node being identified by a node address of the relay node (see col.4 lines 4-22).

Regarding claims 3, 9, 15 and 21, Wilson et al. disclose data processed by the relay node are synchronized with data processed by the user node (see 306, fig.3).

Regarding claims 5, 11, 17 and 23, Wilson et al. disclose comprising a node information management unit configured to store information of the user node and the relay node (see 303, fig.300).

Regarding claims 6, 12, 18 and 24, Wilson et al. disclose the user node is able to transmit signals to or receive signals from the corresponding node without going through the relay node (see 106, 101, 202, fig.2).

Regarding claim 7, Wilson et al. disclose a relay node in a communication system including a user node, a corresponding node able to transmit signals to or receive signals from the user node, and the relay node able to transmit signals to or receive signals from the user node, the relay node being constantly connected to the corresponding node, and able to act as proxy for the user node to transmit signals to or receive signals from the corresponding node (see fig.3, col.8 lines 12-30).

Regarding claim 13, Wilson et al. disclose a user node in a communication system including the user node, a corresponding node able to transmit signals to or receive signals from the user node, and a relay node able to transmit signals to or receive signals from the user node, the user node being able to be replaced by the relay node which is constantly connected to the corresponding node to transmit signals to or receive signals from the corresponding node (see fig.3, col.10 lines 59-60).

Regarding claim 19, Wilson et al. disclose a method of operating a communication system comprising a user node, a corresponding node able to transmit signals to or receive signals from the user node, and a relay node able to transmit signals to or receive signals from the user node, comprising: a first step of constantly connecting the relay node to the

corresponding node; and a second step of transmitting or receiving signals between the user node and the corresponding node with the relay node acting as proxy for the user node to transmit signals to or receive signals from the corresponding node (see fig.3, col.8 lines 12-30, col.10 lines 59-60).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 10, 16 and 22, are rejected under 35 U.S.C. 103(a) as being obvious over Wilson et al. in view of Schmutz et al. (US Patent 6,748,212).

Regarding claims 4, 10, 16 and 22, Wilson et al. fail to disclose comprising a link monitoring unit configured to monitor a communication link between the user node and the relay node.


In an analogous art, signal quality between the fixed base station and the repeater transmission, Schmutz et al. disclose comprising a link monitoring unit configured to monitor a communication link between the user node and the relay node (see abstract). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Wilson et al. with the above teaching of Schmutz et al. in order to provide measuring signals between the repeater and the base station to avoid interference (as suggested by Schmutz, see col.9 lines 57-65).

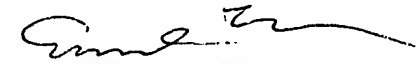
### Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883. The examiner can normally be reached on Monday through Friday from 6:30AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
June 30, 2006

  
EDWARD F. URBAN  
SUPERVISORY PATENT EXAMINER  
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